

## **How's the Quality of Water in Lower Howards Creek?**

**Lower Howards Creek** is located in southwestern Clark County. Lower Howards Creek watershed contains all the land that drains into Lower Howards Creek, including the creeks that run into Lower Howards Creek. The watershed covers approximately 19.3 square miles, including the southern portion of the City of Winchester and portions of smaller communities including Boonesborough. It is important to know that our activities on the land affect the quality of the water in our streams. Many things that are put on the ground surface get carried into the stream by rainwater. This includes things such as litter, fluids leaked from cars, bacteria in pet and livestock waste, and pesticides and fertilizers.

The Clean Water Act requires that all waters, including streams, be safe for swimming, fishing, and drinking (these are called uses). As part of that requirement, the KY Division of Water (DOW) observes conditions, and tests the water quality of Kentucky's streams to determine if these waters are meeting their uses. If the stream is not clean enough to meet its uses, the stream is found to be impaired. In 2012, DOW reported that Lower Howards Creek is impaired by pollution from river mile 2.65, where Lower Howards Creek intersects West Fork, to river mile 6.5 near the Carroll Ecton Water Treatment facility. The sources of pollution were attributed to human sewage and manure.

## **So Should You Swim or Wade In it?**

Well, we're not sure because those uses have not been evaluated. The short answer is probably not. As mentioned earlier, the stream was found to have pollution from human sewage and manure. High amounts of bacteria and the other germs found in sewage and manure create a higher chance of getting sick from contact with the water. Check back. When those uses are determined, you will be the first to know!

## **But Wait....There's Good News!**

On April 10, 2007, Winchester Municipal Utilities (WMU) and the City of Winchester entered into a legal agreement that required that work be done to improve the sewer system. One of the conditions required was the elimination of sanitary sewer overflows (SSOs) in the sewer

collection system. SSOs are discharges of untreated sewage from municipal sanitary sewer systems as a result of broken pipes, equipment failure, or system overload. SSOs can cause significant amounts of bacteria from raw sewage to enter our waterways. At the time, there were 13 SSOs putting water and raw sewage into Lower Howards Creek and the creeks that flow into it. That's not the good news. The good news is that since that date, 11 of the SSOs have been eliminated. The remaining 2 SSOs will be eliminated as part of an upcoming WMU project. A Lower Howards Creek Watershed Management Plan has also been developed, which, when implemented, will help to:

1. Improve stream health for safe swimming use;
2. Improve watershed awareness and education in the community;
3. Diversify and increase the presence of wildlife found both on land and in the water;
4. Implement measures to protect the stream during future development;
5. Improve the overall appearance of the stream; and
6. Improve stormwater management (reduce flooding), especially during large rain events.

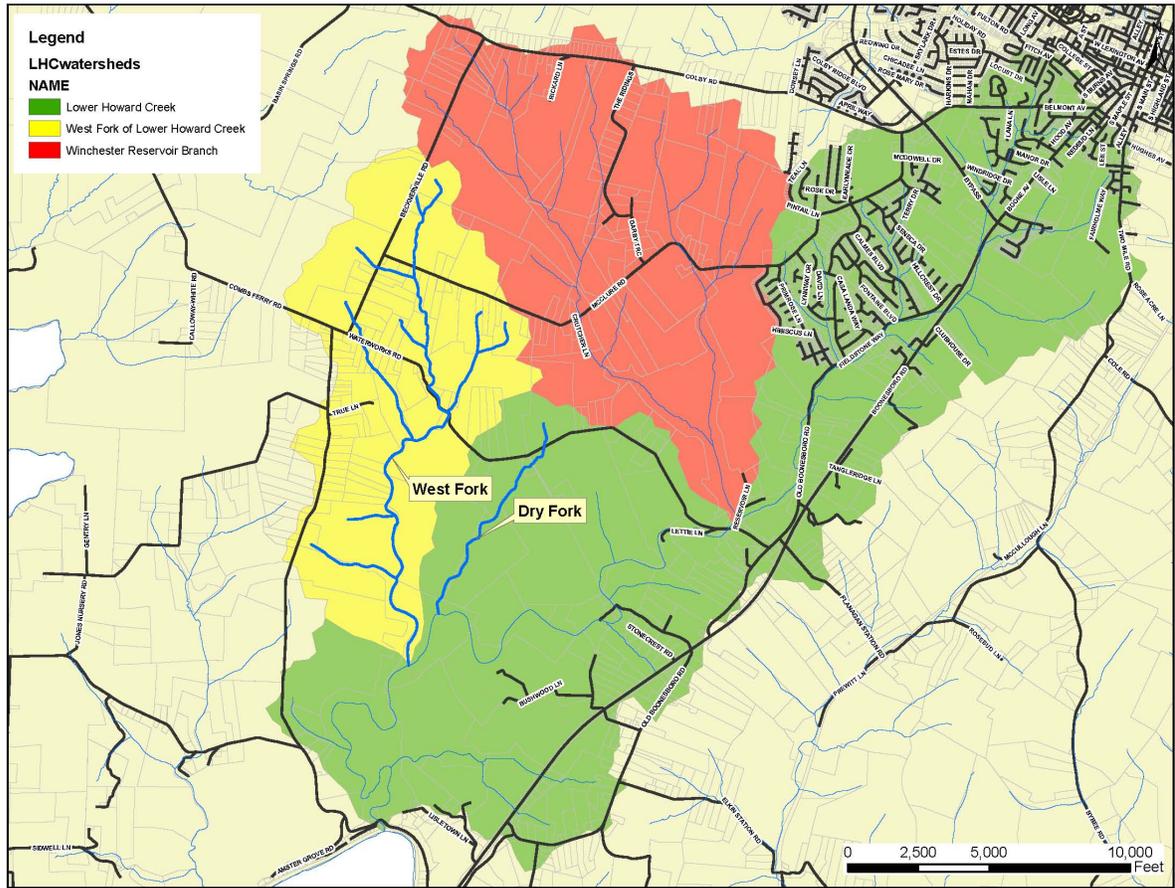


Figure A. Map of Lower Howards Creek Watersheds